



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-------------------------------------------------------------|-------------|----------------------|---------------------|------------------|
| 09/780,901 | 02/09/2001 | Charlene A. Boehm | 46607-248184 | 6758 |
| 7590 | 06/30/2006 | | EXAMINER | |
| Charlene A. Boehm 320 Gilbert Road Columbus, NC 28722 | | | MORAN, MARJORIE A | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1631 | |

DATE MAILED: 06/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/780,901 | BOEHM, CHARLENE A. | |
| | Examiner | Art Unit | |
| | Marjorie A. Moran | 1631 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-7,9 and 10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2, 4-7, 9-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/14/06 has been entered.

Claims 1-2, 4-7 and 9-10 are pending. All rejections and objections not reiterated below are hereby withdrawn.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-2, 4-7 and 9-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites a step of programming a frequency-emitting device to emit "at least one resonant frequency..." Claim 1 also recites steps of determining a first therapeutic resonant frequency and "at least one other" therapeutic resonant frequency, therefore it is unclear whether the "at least one resonant frequency" recited in the programming step is intended to be one of the therapeutic resonant frequencies determined/calculated earlier in the claim, or is intended to be an entirely different

resonant frequency, therefore the claim is indefinite. If the latter, then it is noted that the “programming” step appears to have no connection to other claimed method steps, and the claim is further indefinite.

Claim 1 recites a step of influencing a disease-associated genomic material with “at least one resonant frequency...” As with the “resonance frequency recited in the programming step, above, it is unclear whether the “at least one resonant frequency” recited in the programming step is intended to be one of the therapeutic resonant frequencies determined/calculated earlier in the claim, or is intended to be an entirely different resonant frequency. It is also unclear whether the resonant frequency of the influencing step is intended to be the same as that of the programming step. For these reasons, the claim is indefinite.

Claims 1 and 7 recite the term “debilitating” with regard to a genomic material or pathogen. Merriam-Webster defines the term “debilitating” to mean “impair strength” or “weaken.” The specification does not set forth a specific definition for this term; however, Merriam-Webster online defines the term “debilitating” to mean “impair strength” or “weaken.” One of skill in the art would understand what is meant by weakening a pathogen, but not what is intended by “weakening” a genomic material. Does applicant intend to fractionate the genomic material or make it more susceptible to fractionation? Or perhaps applicant intends that the genomic material be more susceptible to protease digestion? Etc. As it is unclear what is intended by “debilitating” a genomic material, claim 1 is indefinite.

Claim 1 recites the limitation "the host or system" in the last line. There is insufficient antecedent basis for this limitation in the claim, as neither a host nor a system are recited earlier in the claim.

Claims 2, 4-7 and 9-10 depend directly or indirectly from claim 1 and are therefore also indefinite for the reasons set forth above.

Claim 2 recites a step of "using" a value as a wavelength. It is unclear what step or steps are intended to be encompassed by "using", therefore the claim is indefinite. It is further unclear what limitation of claim 1 is intended by use of "wavelength" as claim 1 does not recite any limitations regarding a "wavelength," thus claim 2 is further indefinite.

Claim 4 recites determining the velocity of electromagnetic radiation..." in lines 3-4. Parent claim 1 also recites determining a velocity of electromagnetic radiation, therefore it is unclear whether the electromagnetic radiation of claim 4 is intended to be the same as that of claim 1. If so, then this rejection may be overcome by inserting -- the-- before "electromagnetic radiation" in line 4.

Claim 5 recites "one resonant frequency" in line 4. Parent claim 1 recites multiple resonant frequencies, therefore it is unclear if the "one resonant frequency" of claim 4 is intended to be one of THE resonant frequencies determined or calculated in claim 1, or a different resonant frequency.

Claim 6 recites "at least one previously calculated resonant frequencies" in line 2. Parent claim 1 recites "divided" or multiplied" (i.e. calculated) resonant frequencies, therefore it is unclear if the "previously calculated resonant frequencies" of claim 5 is

Art Unit: 1631

intended to be one of THE previously calculated resonant frequencies recited in claim 1, or a different resonant frequency.

Claim 6 recites "the at least one harmonic and/or subharmonic frequencies" in lines 9-10, which lacks antecedent basis. Claim 6 recites determining "subharmonic frequencies" and "harmonic frequencies" in tow earlier claim steps; however, claim 6 does not recite "at least one" frequency of any type anywhere in the claim.

Conclusion

No claims are allowable.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marjorie A. Moran whose telephone number is (571) 272-0720. The examiner can normally be reached on Monday-Friday; 6 am-2:30 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Wang can be reached on (571)272-0811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1631

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Marjorie A. Moran
Primary Examiner
Art Unit 1631

Marjorie A. Moran
6/26/06